REMARKS

Claim 15 stands rejected under 35 USC 101 as being directed to non-statutory subject matter. Claims 1, 7, 9, and 15-19 stand rejected under 35 USC 102(e) as being anticipated by Fellman et al '702. Claims 3, 4-6, 11, and 12 stand rejected under 35 USC 103(a) as being unpatentable over Fellman in view of Lahr et al '266.

Claims 1 through 12 and 15 - 23 are pending in the application.
Claims 1 - 2, 4, 6 - 7, 9, 10, 12 and 15 - 19 have been amended.
Claim 20 - 23 have been added.

Support for the amendments

Support for the feature of "for bringing the data into a format specified by a communication protocol used by the communication system" can be found in §[0006]. Support for the feature of a "synchronized clock synchronized with respect to a global time base of the communication system" can be found in Figs. 40 and 41 and §[1324], [1334]-[1335] . In Figs. 40, 41 the macrotick corresponds to the synchronized clock signal, (see §[0022]). Support for the feature of "enabling or disabling transmit access" can be found in Fig. 82 and §[2426]. Support for the features recited in claims 20-23 can be found at § [0562] and Fig. 117.

Rejections 35 USC 101

Claim 15 stands rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. Claim 15 is now made dependent on claim 1. Accordingly, the rejection is traversed.

Rejections 35 USC 102

Claims 1, 7, 9, 15-19 stand rejected under 35 U.S.C. §102(e) as being anticipated by Fellman. The rejection is respectfully traversed because Fellman does not disclose each and every feature recited in claim 1. In particular, besides other differences, Fellman does not disclose a communication controller for bringing the data into a format specified by a communication protocol used by the communication system as recited in claim 1. The Final Office Action asserts that the device adapter 1000 corresponds to the feature of a "communication controller" as recited in claim 1. However, Fellman discloses that the device adapter 1000 transmits packets from the devices during an assigned phase and does not transmit packets from the devices during a phase assigned to another one of the device adapters (see column 11 line 67-column 12 line 3). Accordingly, the device adapter 1000 receives data that is already into a format (the packets) specified by a communication protocol (CSMA/CD protocol in Fellman). Thus, device adapter 1000 does not bring the data into a format specified by a communication protocol used by the communication system. Accordingly, Fellman does not disclose a "communication controller for bringing the data into a format specified by a communication protocol used by the communication system", as recited in claim 1.

Fellman also fails to disclose "a bus guardian internal clock signal which is less accurate than said synchronized clock signal" as recited in claim 1. The Final Office Action asserts that the synchronization signal coming from a master timing device corresponds to the feature of a synchronized

signal as recited in claim 1 and that the internal clock 1010 corresponds to the feature of an "electronic circuit generating a bus guardian internal clock signal" as recited in claim 1. Fellman discloses a device adapter 1000 which connects a (non-)real time device 100, 200 to a network 110 (Fellman Fig. 1, column 9 line 66-column 10 line 6). The device adapter 1000 includes a processor 1002 and interfaces 1004, 1006, 1008 which connect the processor 1002 to the devices 100, 200 and the network 110 respectively (see Fig. 3 and column 10 line 23-28). The processor 1002 is connected to a local clock 1010 (see Fig. 3). The local clock 1010 provides a time reference to the device adapter 1000 (see column 10 lines 57-59 and 62-66). The local clock 1010 may be synchronized to a master timing device by assigning: "(..)one of the device adapter 1000 as master timing device that transmits a synchroniz**ation** signal (emphasis added) at regular intervals to synchronize the local clock 1010 of each adapter" (column 10 lines 64-66). Thus, the device adapter 1000 includes one single clock only, local clock 1010, which is synchroni**zed** to the synchroniz**ation** signal from the master timing device. Thus, following the interpretation asserted in the Office Action, the communication controller (the device adapter 1000) only includes the local clock 1010, which therefore has to be the synchronized clock (synchronized to the synchronization signal of the master timing device). However, Fellman does not disclose that the device adapter 1000 includes a second clock in addition to the local clock 1010. Accordingly, Fellman does not disclose that there is "a bus guardian internal clock signal which is less accurate than said synchronized clock signal" as recited in claim 1.

Furthermore, Fellman does not disclose a "bus guardian having means for supervising the period of said synchronized clock signal using said internal clock signal" as recited in claim 1. It is observed that what has been asserted to be a synchron**ized** signal in the Office Action (the synchroniz**ation** signal transmitted by the master timing device) is not supervised using the local clock 1010, rather the local clock 1010 is supervised using the synchroniz**ation** signal transmitted by the master timing device. Thus, Fellman does not disclose a "bus guardian having means for supervising the period of said synchronized clock signal using said internal clock signal" as recited in claim 1.

Accordingly, Fellman does not disclose each and every feature recited in amended claim 1. Accordingly, the subject matter of claim 1 is novel and claim 1 is submitted to be allowable. Independent Claims 9 recites features corresponding to those of claim 1 and for that matter is novel as well. The other claims are dependent claims referring to one of the independent claims, and for that matter already novel well. The applicant therefore submits that the claims satisfy the requirements of 35 USC 102 and 103.

Because of the above, it is submitted that the application is in condition for allowance and accordingly, the Examiner is cordially invited to issue a notification of allowance.

No new matter has been added in this amendment.

Respectfully submitted,

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